

IMPAIRMENT AFTER THE JOHNSON CASE

2021 Kansas Department of Labor Worker's
Compensation Seminar

September 28, 2021

David W. Hufford, M.D.

“When I use a word it means just what I choose it to mean-neither more nor less.”

Humpty Dumpty to Alice in “Through the Looking Glass”

WHERE WE WERE

The AMA Guides began as a series of articles in JAMA that were compounded into a single text, the AMA Guides. Periodically these were revised and a new edition was issued leading up to our most current edition, the 6th.

Impairment values are arrived at by a consensus of medical experts who meet in the preparation of each edition of the Guides before its publication and periodically in the interim.

The fourth and fifth editions of the Guides uses both range of motion and Diagnosis Related Estimates (DRE) to determine impairment values. Please note with emphasis the term “Estimate”.

The sixth edition uses primarily the Diagnosis Based Impairment (DBI) model and in the upper and lower extremity chapters the alternative range of motion model. Range of motion is most commonly used in the upper extremity chapter as many injuries result in impaired range of motion of the joint which renders the DBI method invalid.

Table 2. Mental Status Impairments.

Impairment description	% Impairment of the whole person
Impairment exists, but ability remains to perform satisfactorily most activities of daily living	1 - 14
Impairment requires direction and supervision of daily living activities	15 - 29
Impairment requires directed care under continued supervision and confinement in home or other facility	30 - 49
Individual is unable without supervision to care for self and be safe in any situation	50 - 70

Total knee replacement including unicondylar replacement	
Good result, 85-100 points*	15 (37)
Fair result, 50-84 points*	20 (50)
Poor result, less than 50 points*	30 (75)

Table 66. Rating Knee Replacement Results*

	No. of points
a. Pain	
None	50
Mild or occasional	45
Stairs only	40
Walking and stairs	30
Moderate	
Occasional	20
Continual	10
Severe	0
b. Range of motion	
Add 1 point per 5°	25
c. Stability (maximum movement in any position)	
Anteroposterior	
<5 mm	10
5-9 mm	5
>9 mm	0
Mediolateral	
5°	15
6°-9°	10
10°-14°	5
≥15°	0
Subtotal	
d. Deductions (minus)	
Flexion contracture	
5°-9°	2
10°-15°	5
16°-20°	10
>20°	20
e. Extension lag	
<10°	5
10°-20°	10
>20°	15
f. Alignment	
0°-4°	0
5°-10°	3 points per degree
11°-15°	3 points per degree
>15°	20
Deductions subtotal	—

*The point total for estimating knee replacement results is the sum of the points in categories a, b, and c minus the sum of the points in categories d, e, and f. Modified from ref. 44.

Table 11. Determining Impairment of the Upper Extremity Due to Pain or Sensory Deficit Resulting from Peripheral Nerve Disorders.

a. Classification		
Grade	Description of sensory deficit or pain	% Sensory deficit
1	No loss of sensibility, abnormal sensation, or pain	0
2	Decreased sensibility with or without abnormal sensation or pain, which is forgotten during activity	1 - 25
3	Decreased sensibility with or without abnormal sensation or pain, which interferes with activity	26 - 60
4	Decreased sensibility with or without abnormal sensation or pain, which may prevent activity, and/or minor causalgia	61 - 80
5	Decreased sensibility with abnormal sensations and severe pain, which prevents activity, and/or major causalgia	81 - 100

b. Procedure	
1.	Identify the area of involvement using the dermatome charts (Figs. 45 and 46, pp. 50 and 52).
2.	Identify the nerve(s) that innervate the area(s) (Table 10, Figs. 45 through 47, pp. 47, 50, 52, and 53).
3.	Grade the severity of the sensory deficit or pain according to the classification given above.
4.	Find the maximum impairment of the upper extremity due to sensory deficit or pain for each structure involved: spinal nerves (Table 13, p. 51), brachial plexus (Table 14, p. 52), and major peripheral nerves (Table 15, p. 54).
5.	Multiply the severity of the sensory deficit by the maximum impairment value to obtain the upper extremity impairment for each structure involved.

Table 15-5 Criteria for Rating Impairment Due to Cervical Disorders

DRE Cervical Category I 0% Impairment of the Whole Person	DRE Cervical Category II 5%-8% Impairment of the Whole Person	DRE Cervical Category III 15%-18% Impairment of the Whole Person	DRE Cervical Category IV 25%-28% Impairment of the Whole Person	DRE Cervical Category V 35%-38% Impairment of the Whole Person
No significant clinical findings, no muscular guarding, no documentable neurologic impairment, no significant loss of motion segment integrity, and no other indication of impairment related to injury or illness; no fractures	<p>Clinical history and examination findings are compatible with a specific injury; findings may include muscle guarding or spasm observed at the time of the examination by a physician, asymmetric loss of range of motion or nonverifiable radicular complaints, defined as complaints of radicular pain without objective findings; no alteration of the structural integrity</p> <p>or</p> <p>individual had clinically significant radiculopathy and an imaging study that demonstrated a herniated disk at the level and on the side that would be expected based on the radiculopathy, but has improved following nonoperative treatment</p> <p>or</p> <p>fractures: (1) less than 25% compression of one vertebral body; (2) posterior element fracture without dislocation that has healed without loss of structural integrity or radiculopathy; (3) a spinous or transverse process fracture with displacement</p>	<p>Significant signs of radiculopathy, such as pain and/or sensory loss in a dermatomal distribution, loss of relevant reflex(es), loss of muscle strength, or unilateral atrophy compared with the unaffected side, measured at the same distance above or below the elbow; the neurologic impairment may be verified by electrodiagnostic findings</p> <p>or</p> <p>individual had clinically significant radiculopathy, verified by an imaging study that demonstrates a herniated disk at the level and on the side expected from objective clinical findings with radiculopathy or with improvement of radiculopathy following surgery</p> <p>or</p> <p>fractures: (1) 25% to 50% compression of one vertebral body; (2) posterior element fracture with displacement disrupting the spinal canal; in both cases the fracture is healed without loss of structural integrity; radiculopathy may or may not be present; differentiation from congenital and developmental conditions may be accomplished, if possible, by examining preinjury roentgenograms or a bone scan performed after the onset of the condition</p>	<p>Alteration of motion segment integrity or bilateral or multilevel radiculopathy; alteration of motion segment integrity is defined from flexion and extension radiographs as at least 3.5 mm of translation of one vertebra on another, or angular motion of more than 11° greater than at each adjacent level (Figures 15-3a and 15-3b); alternatively, the individual may have loss of motion of a motion segment due to a developmental fusion or successful or unsuccessful attempt at surgical arthrodesis; radiculopathy as defined in cervical category III need not be present if there is alteration of motion segment integrity</p> <p>or</p> <p>fractures: (1) more than 50% compression of one vertebral body without residual neural compromise</p>	<p>Significant upper extremity impairment requiring the use of upper extremity external functional or adaptive device(s); there may be total neurologic loss at a single level or severe, multilevel neurologic dysfunction</p> <p>or</p> <p>fractures: structural compromise of the spinal canal is present with severe upper extremity motor and sensory deficits but without lower extremity involvement</p>

Table 2. Impairment Classes and Percents for Skin Disorders.*

Class 1: 0%-9% impairment	Class 2: 10%-24% impairment	Class 3: 25%-54% impairment	Class 4: 55%-84% impairment	Class 5: 85%-95% impairment
Signs and symptoms of skin disorder are present or only intermittently present; and There is no limitation or limitation in the performance of <i>few</i> activities of daily living, although exposure to certain chemical or physical agents might increase limitation temporarily; and No treatment or intermittent treatment is required.	Signs and symptoms of skin disorder are present or intermittently present; and There is limitation in the performance of <i>some</i> of the activities of daily living; and Intermittent to constant treatment may be required.	Signs and symptoms of skin disorder are present or intermittently present; and There is limitation in the performance of <i>many</i> of the activities of daily living; and Intermittent to constant treatment may be required.	Signs and symptoms of skin disorder are <i>constantly</i> present; and There is limitation in the performance of <i>many</i> of the activities of daily living that may include intermittent confinement at home or other domicile; and Intermittent to constant treatment may be required.	Signs and symptoms of skin disorder are <i>constantly</i> present; and There is limitation in the performance of <i>most</i> of the activities of daily living, including occasional to constant confinement at home or other domicile; and Intermittent to constant treatment may be required.

*The signs and symptoms of disorders in classes 1 and 2 may be intermittent and not present at the time of examination. The impact of the skin disorder on daily activities should be the primary consideration in determining the class of impairment. The frequency and intensity of signs and symptoms and the frequency and complexity of medical treatment should guide the selection of an appropriate impairment percentage and estimate within any class (see chapter introduction).

TABLE 13-8 Criteria for Rating Neurologic Impairment due to Alteration in Mental Status, Cognition, and Highest Integrative Function (MSCHIF)



Alteration in MSCHIF

CLASS	CLASS 0	CLASS 1	CLASS 2	CLASS 3	CLASS 4
WHOLE PERSON IMPAIRMENT RATING (%)	0%	1%–10%	11%–20%	21%–35%	36%–50%
EXTENDED MENTAL STATUS EXAM	Normal	Mild abnormalities	Moderate abnormalities	Severe abnormalities	Most profound abnormalities
NEUROPSYCHOLOGICAL ASSESSMENT AND TESTING ^a	Normal	Mild abnormalities	Moderate abnormalities	Severe abnormalities	Most profound abnormalities
DESCRIPTION	Normal MSCHIF	Alteration in MSCHIF but patient is able to assume all usual roles and perform ADLs	Alteration in MSCHIF that interferes with ability to assume some normal roles or perform ADLs	Alteration in MSCHIF that significantly interferes with ability to assume normal roles or perform ADLs	Alteration in MSCHIF that prohibits performance of normal roles or performance of ADLs

^a Neuropsychological testing may not always be required but may serve as a useful resource.

TABLE 15-34**Shoulder Range of Motion**

Grade Modifier		0	1	2	3	4
Severity		None (Normal)	Mild	Moderate	Severe	Ankylosis
Motion (percentage compared to normal)		$\geq 90\%$	61% to 90%	31% to 60%	$\leq 30\%$	
Joint						
Shoulder	50% Shoulder					
Flexion	Motion° = % Upper Extremity Impairment (% UEI)	$\geq 180^\circ = 0\%$	90° to 170° = 3% UEI	20° to 80° = 9% UEI	$\leq 10^\circ = 16\% \text{ UEI}$	20° to 40° flexion = 15% UEI 10° flexion to extension or $\geq 50^\circ$ flexion = 25% UEI
Extension		$\geq 50^\circ = 0\%$	30° to 40° = 1% UEI	10° extension to 10° flexion = 2% UEI	$\geq 10^\circ$ flexion = 10% UEI	
Shoulder	30% Shoulder					
Abduction	Motion° = % Upper Extremity Impairment (% UEI)	$\geq 170^\circ = 0\%$	90° to 160° = 3% UEI	20° to 80° = 6% UEI	$\leq 10^\circ = 10\% \text{ UEI}$	20° to 50° of abduction = 9% UEI $\leq 10^\circ$ or $\geq 60^\circ$ abduction = 16% UEI
Adduction		$\geq 40^\circ = 0\%$	10° to 30° = 1% UEI	0° to 30° abduction = 2% UEI	$\geq 40^\circ$ abduction = 10% UEI	
Shoulder	20% Shoulder					
Internal rotation (IR)	Motion° = % Upper Extremity Impairment (% UEI)	$\geq 80^\circ \text{ IR} = 0\%$	50° IR to 70° IR = 2% UEI	10° ER to 40° IR = 4% UEI	$\leq 20^\circ \text{ ER} = 8\% \text{ UEI}$	20° to 50° IR = 6% UEI $\geq 60^\circ \text{ IR}$ or 10° IR to ER = 0% UEI
External Rotation (ER)		$\geq 60^\circ \text{ ER} = 0\%$	50° ER to 30° IR = 2% UEI	50° IR to 40° IR = 4% UEI	$\geq 60^\circ \text{ IR} = 9\% \text{ UEI}$	

TABLE 15-35

Range of Motion Grade Modifiers

	Grade Modifier 0	Grade Modifier 1	Grade Modifier 2	Grade Modifier 3	Grade Modifier 4
Digit	Normal	<20% total digit impairment	20% to 39% digit impairment	40% to 70% digit impairment	>70% digit impairment.
Hand, wrist, elbow, or shoulder		<12% upper extremity impairment for <i>total</i> motion impairment	12% to 23% upper extremity impairment for <i>total</i> motion impairment	24% to 42% upper extremity impairment for <i>total</i> motion impairment	>42% upper extremity impairment for <i>total</i> motion impairment

TABLE 15-36

Functional History Grade Adjustment: Range of Motion

Net Modifier	0	1	2	3
Functional History grade adjustment compared to range of motion ICF Class	Equal	1 Higher	2 Higher	3 Higher
Increase to total range of motion impairment	No change	Total Range of Motion Impairment \times 5%	Total Range of Motion Impairment \times 10%	Total Range of Motion Impairment \times 15%

ICF indicates International Classification of Functioning, Disability, and Health.

THE TRUTH IS OUT THERE

I begin every impairment rating with the philosophy/principle/premise that there is correct value that defines an individual's impairment and that it is my solemn duty to find that value. In the sixth edition of the Guides this is done largely through the Diagnosis Based Impairment (DBI) tables. The main alternative to this is to utilize range of motion as an entirely objective parameter to determine impairment. However, when using the DBI methodology the impairment rating begins with an accurate diagnosis.

WHAT THE DIAGNOSIS IMPLIES

- Etiology-That is the equivalent of causation and the prevailing factor in the IME process.
- Treatment-This is what most individuals are interested in when they seek the advice of a physician.
- Prognosis-This is the equivalent of the impairment rating, need for permanent restrictions and anticipated future medical treatment in the IME process. I believe strongly this aspect of the interaction is often shortchanged and the source of most individual's dissatisfaction with the medical encounter.

DETERMINING IMPAIRMENT

(MAKING SAUSAGE)

- History-Subjective. What the patient tells you. Includes functional history.
- Physical Examination-Includes elements that are subjective (straight leg raise for example)
- Clinical studies-X-rays, CT scans, MRI results, electrodiagnostic testing.
- These 3 elements help to establish the diagnosis and correspond to the 3 modifiers that are used in the sixth edition DBI tables. The rating reflects a synthesis of these elements to determine the diagnostic category and final impairment value with the use of these modifiers.

WHERE WE ARE

On January 1, 2015 the 6th edition of the AMA Guides became the “law of the land” followed by the district court decision declaring this edition of the Guides unconstitutional. For the next 2.5 years impairment ratings were then requested under both the 4th edition and 6th edition waiting on the Supreme Court to sort out the issue when it issued the Johnson decision earlier this year.

THE JOHNSON DECISION

The Johnson decision was written by Justice Stegall and delivered in January of this year. From page 7 of the decision: “The use of the phrase ‘based on’ indicates the Legislature intended the Sixth Edition to serve as a standard starting point for the more important and decisive ‘competent medical evidence’.”

What does this mean? The impairment rating was always to have been based on the standard of competent medical evidence. The rub is the addition of the phrase “as a standard starting point”.

To understand the impairment numbers we must understand how they were arrived at. Throughout the history of The Guides the numbers have been set by panels of expert physicians who meet periodically at the AMA to discuss these issues and determine what is an appropriate impairment for various conditions. This is where competent medical evidence comes into play, the nature of this discussion and interaction between these committees of physicians who have debated these issues and arrived at the final impairment values in each edition.

My own personal view of assigning final impairment is to stay with the 6th edition of the Guides primarily and only waver if the functional impairment is of sufficient magnitude that I do not feel the Guides correctly defines this. Keep in mind this is using largely subjective criteria and we must rely on the veracity of the individual claimant.

WHERE WE ARE GOING

There is now the AMA Guides Editorial Panel that meets regularly regarding the AMA Guides. The co-chairs are Dr. Mark Melhorn whom we all know and Dr. Doug Martin, an Occupational Medicine physician in Sioux City, Iowa. The meetings are open to anyone who wishes to participate and opinions are solicited before the scheduled meeting regarding suggested revisions to the Guides. The first chapter to be addressed was the Mental and Behavioral Disorders chapter. There were also additional cosmetic but not substantive revisions made to several other chapters which can be found on the AMA website. To access the revisions you must subscribe to the virtual edition of the Sixth edition to see any changes in the recommended impairment values or methodology. In the coming year more chapters will be addressed including the musculoskeletal chapters. The web address is AMA Guides Editorial Panel | American Medical Association (ama-assn.org).

BIBLIOGRAPHY

The AMA Guides to the Evaluation of Permanent Impairment, fourth, fifth and sixth editions.

Through the Looking Glass, Lewis Carroll